## Quiz 7 <br> TQS 211

Show all your work (algebraically or geometrically) for each and simplify. No credit is given without supporting work.

1. ( $\S 5.3 \# 21)$ The figure below is the graph of $f$.

(a) [2] Find $\int_{-3}^{1} f(x) d x$. (No estimations.)
(b) [2] If the area shaded in the graph above (yes, that is shading) is $A$, estimate

$$
\int_{-3}^{4} f(x) d x
$$

2. $(\S 5.5 \# 3)[2]$ Find $\int_{0}^{50}-q+56 d q$
3. $(\S 7.3 \# 23)[4]$ Find $\int_{0}^{1} 2 t e^{-t^{2}} d t$.
